

### REMARKS

Claims 1-20 are pending in this application, with claims 6, 7, 10, 13, 14, 17 and 18 being amended and claims 4, 5, 15 and 16 being cancelled by this response. Applicant respectfully submits that support for the amendments to the claims can be found throughout the specification and more specifically on, pages 19 – 23 and indicated as “Test Example 1”. Therefore, Applicant respectfully submits that no new matter has been added by these amendments.

#### **Objection to the Specification**

The Abstract is objected to for failing to comply with MPEP § 608.01(b) because it is in two paragraphs. Applicant has formally amended the Abstract as indicated herein to be a single paragraph, thus complying with MPEP § 608.01(b). Therefore, Applicant respectfully submits that this objection has been satisfied and should be withdrawn.

#### **Objection to the Claims**

Claim 10 is objected to because it is not in a sentence. Claim 10 is formally amended to be in a sentence. Therefore, Applicant respectfully submits that this objection has been satisfied and should be withdrawn.

#### **Rejection of Claims 4 – 7 and 13 – 18 under 35 USC 112, second paragraph**

Claims 4 – 7 and 13 – 18 are rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4, 5 and 16 are rejected because the terms “high” or “higher” are relative terms and therefore render the claims indefinite. Claims 4, 5 and 16 are cancelled by this response, thus Applicant respectfully submits that this rejection is moot.

Claims 6 and 17 are indefinite because it is not clear what is exactly encompassed by a “derivative” of caffeic acid. Applicant respectfully disagrees and submits that one skilled in the art recognizes that the term caffeic acid is a compound that includes hydroxyl groups and

carboxyl groups and that any “derivative” thereof is a compound having the basic caffeic acid structure wherein either or both of the hydroxyl group and carboxyl group is replaced by a different functional group. For example, caffeic acid derivatives may include esterified carboxyl group of caffeic acid such as caffeic ester (e.g. chlorogenic acid), amidated carboxyl group of caffeic acid such as caffeic acid amide, caffeic acid anhydride and an alkyl-substituted caffeic acid compound such as ferulic acid and other similar derivative. This well known definition of caffeic acid derivative is further evidenced in the two articles being submitted herewith as part of an Information Disclosure Statement. Therefore, Applicant respectfully submits that the term “caffeic acid derivatives” claimed in claims 6 and 17 satisfies the requirements of 35 USC 112, second paragraph and is not indefinite. Thus, Applicant respectfully submits that this rejection has been satisfied and should be withdrawn.

Claims 13 and 14 are rejected as being indefinite because it is unclear if the Applicant is claiming a method or a composition. Claims 13 have been amended to be method claims. Specifically, claim 13 is amended to recite a “method of producing a muscular strength enhancing agent using caffeic acid derivatives derived from fruits” and claim 14 is amended to recite a “method of producing a body-fat regulating agent using caffeic acid derivatives derived from an apple”. Therefore, as these are properly claimed methods, Applicant respectfully submits that this rejection has been satisfied and should be withdrawn.

#### **Rejection of Claims 13 and 14 under 35 USC 101**

Claims 13 and 14 are rejected under 35 USC 101 because the claimed invention is non-statutory subject matter because they are “use” claims not in accordance with U.S. patent practice. As discussed above with respect to the rejection under 35 USC 112, second paragraph, claims 13 and 14 have been amended to be method claims. Therefore, in view of this amendment, Applicant respectfully submits that claims 13 and 14 are directed towards statutory subject matter. Thus, withdrawal of this rejection is respectfully requested.

#### **Rejection of claims 1- 20 under 35 USC 102**

Claims 1 – 20 are rejected under 35 USC 102(b) as being anticipated by Tanabe et al (U.S. 5,994,413).

Claim 1 provides a muscular strength enhancing agent comprising an active component which is a polyphenol derived from a fruit. The Rejection asserts that Tanabe discloses an equivalent composition. Applicant respectfully disagrees. Specifically, unlike the claimed invention, Tanabe merely provides a composition including a polyphenol that may be used as an antioxidant, an anti-hypertensive agent, an anti-mutagenic agent, an antiallergenic and an anti-carcinogenic agent. There is nothing in Tanabe that discloses or suggests a polyphenol composition derived from fruits for use as a muscular strength enhancing agent. Tanabe in the extensive studies detailed therein, specifically show the effectiveness of the composition for the listed purposes. In fact, the properties described in Tanabe are basic metabolic properties and do not specifically enhance the musculoskeletal system as in the claimed composition. As stated on page 9 of the present specification, the muscular strength enhancing agent has a direct and targeted impact on the muscles to increase the amount of muscle and/or enhancing the muscular tension (force displayed by the muscles) and can be applied directly to any type of muscle. There is no enabling disclosure in Tanabe of using polyphenol derived from fruit as a muscular strength enhancing agent as claimed in claim 1. Consequently, withdrawal of the rejection of claim 1 is respectfully requested.

Claim 3 provides a body-fat regulating agent comprising an active component is a polyphenol derived from an apple. Similarly to the arguments presented above with respect to claim 1, Tanabe fails to disclose or suggest a body fat regulating agent having an active component of polyphenol that is derived from an apple. Unlike the claimed invention, Tanabe is merely concerned with affecting general metabolic activities and is unable to provide a body fat regulating agent that has polyphenol derived from an apple as an active ingredient. Specifically, the claimed body-fat regulating suppresses the accumulation of excess absorbed energy as body fat without unduly repressing the absorption of energy or becoming dangerously thin due to the decrease of body fat (Application page 10). There is nothing in Tanabe that discloses or suggests an equivalent composition able to have the same effects as the present claimed body fat regulating agent. Consequently, withdrawal of the rejection of claim 3 is respectfully requested.

Claims 11 and 12 are dependent on claim 1 and are considered patentable for the reasons presented above with respect to claim 1. Claims 11 and 12 are also considered patentable because Tanabe fails to disclose or suggest either a food or beverage including the muscular strength enhancing agent as claimed in claim 11 or a pharmaceutical as claimed in claim 12. Unlike the claimed invention, Tanabe is merely concerned with the process of purifying the polyphenol and testing its efficacy on certain physiological functions. Specifically, Tanabe tests the efficacy of the composition as antioxidant, an anti-hypertensive, an anti-mutagenic, an anti-carcinogenic and an anti-allergenic. There is nothing in Tanabe that discloses or suggests either a food or beverage or a pharmaceutical that includes the claimed muscular strength enhancing agent that has a direct and targeted impact on the muscles to increase the amount of muscle and/or enhancing the muscular tension (force displayed by the muscles) and can be applied directly to any type of muscle as claimed in claims 11 and/or 12. Consequently, withdrawal of the rejection of claims 11 and 12 is respectfully requested.

Claim 13 provides a method of producing a muscular strength enhancing agent using caffeic acid derivatives derived from fruits. As discussed above, Tanabe fails to provide any enabling disclosure that anticipates the present claimed invention. In fact, Tanabe merely provides using a polyphenol as an antioxidant, an anti-hypertensive, an anti-mutagenic, an anti-carcinogenic and an anti-allergenic. Moreover, there is nothing to suggest that Tanabe sought to use a caffeic acid derivative as a muscular strength enhancing agent. This assertion is supported by Tanabe's admission in column 4, lines 56- 60 whereby Tanabe states "[t]hus, the fruit polyphenol obtained...is considered to have various physiological functions and the present inventor made an extensive study". The Tanabe patent continues to provide multiple examples of different effects on different functions. However, in the exhaustive tests described in Tanabe, there is nothing that discloses or suggests "using caffeic acid derivatives derived from fruits" to produce "a muscular strength enhancing agent" as claimed in claim 13. For example, the muscular strength enhancing agent produced by the claimed method is shown to increase the muscular strength of rats as shown using different muscle measurements. Specifically, as discussed on pages 19 – 23 of the present specification, by producing a muscular enhancing agent "using caffeic acid derivatives derived from fruits", and combining the agent with a typical feed diet, the titanic-tension per weight of the gastrocnemius muscle of the rats was enhanced

approximately 20% and an increase in the muscular twitch-tension was observed as compared to rats not ingesting the muscular strength enhancing agent. Therefore, the production of a muscular strength enhancing agent “using caffeic acid derivatives derived from fruits” is advantageous and is neither disclosed nor suggested by Tanabe. Consequently, withdrawal of the rejection of claim 13 is respectfully requested.

Claim 14 provides a method of producing a body-fat regulating agent using caffeic acid derivatives derived from an apple. Similarly as discussed above with respect to claim 13, Tanabe fails to disclose or suggest producing a body-fat regulating agent of any kind. Rather, Tanabe merely discloses production of an antioxidant, an anti-hypertensive, an anti-mutagenic, an anti-carcinogenic and an anti-allergenic that includes a polyphenol. Moreover, Tanabe acknowledges performing exhaustive tests on different physiological functions and resulted in a composition only able to affect the above enumerated functions. Thus, Tanabe does not anticipate the present claimed invention. Moreover, as discussed on pages 23 – 25 under the heading “Test Example 2”, the claimed method produces a body-fat regulating agent that significantly lowered the visceral fat of rats that were fed with a typical diet in combination with the claimed body-fat regulating agent. Therefore, the production of a body fat regulating agent “using caffeic acid derivatives derived from apples” is advantageous and is neither disclosed nor suggested by Tanabe. Consequently, withdrawal of the rejection of claim 13 is respectfully requested.

Claims 19 and 20 are dependent on claim 3 and are considered patentable for the reasons presented above with respect to claims 1 and 3. Claims 19 and 20 are also considered patentable because Tanabe fails to disclose or suggest either a food or beverage including the body-fat regulating agent as claimed in claim 11 or a pharmaceutical as claimed in claim 12. Unlike the claimed invention, Tanabe is merely concerned with the process of purifying the polyphenol and testing its efficacy on certain physiological functions. Specifically, Tanabe tests the efficacy of the composition as antioxidant, an anti-hypertensive, an anti-mutagenic, an anti-carcinogenic and an anti-allergenic. There is nothing in Tanabe that discloses or suggests either a food or beverage or a pharmaceutical that includes the claimed body-fat regulating agent that suppresses the accumulation of excess absorbed energy as body fat without unduly repressing the absorption of energy or becoming dangerously thin due to the decrease of body fat as claimed in claims 19

and/or 20. Consequently, withdrawal of the rejection of claims 19 and 20 is respectfully requested.

In view of the above remarks, it is respectfully submitted that Tanabe fails to provide enabling disclosure that anticipates the present invention claimed in claims 1, 3, 13 and 14. As claims 2, 6-8, 11 and 12 are dependent on claim 1, claims 9, 10, 15, 17 – 20 are dependent on claim 3, Applicant respectfully submits that these claims are similarly patentable over Tanabe. Therefore, Applicant further respectfully submits that this rejection has been satisfied and should be withdrawn.

#### **Information Disclosure Statement**

Enclosed is an Information Disclosure Statement pursuant to 37 CFR 1.97 including two non-patent publications that were discussed above in support of Applicants Remarks regarding the rejection of 35 USC 112, second paragraph. The cited references are not deemed to disturb the patentability of the claims as amended herein.

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

No fee is believed due. However, if a fee is due, please charge the fee to Deposit Account 50-2828.

Respectfully submitted,  
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